PTO/SB/01 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respo d to a collection of information unless it contains a valid OMB control number. Attorney Docket Number DECLARATION FOR UTILITY OR First Named Inventor David H. Shen **DESIGN** COMPLETE IF KNOWN PATENT APPLICATION (37 CFR 1.63) Application Number base on 60/431,980 Filing Date 12/10/2002 Declaration Declaration Submitted after Initial OR Submitted Art Unit With Initial Filing (surcharge Filing (37 CFR 1.16 (e)) **Examiner Name** required) I hereby declare that: Each inventor's residence, mailing address, and citizenship are as stated below next to their name. I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled: DAVID H. SHEN, U.S. CITIZEN, 21037 Dorsey Way, Saratoga, CA 95070 A Radio Frequency Receiver Architecture with Tracking Image-Reject Polyphase Filtering (Title of the Invention) the specification of which **[** is attached hereto OR was filed on (MM/DD/YYYY) as United States Application Number or PCT International Application Number and was amended on (MM/DD/YYYY) (if applicable). I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application. I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed. **Prior Foreign Application** Foreign Filing Date **Priority Certified Copy Attached?** Country Number(s) (MM/DD/YYYY) **Not Claimed** Yes Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P. Box 1450, Alexandria, VA 22313-1450.

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DECLARATION — Utility or Design Patent Application

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Direct all correspondence to:	OR 🕡 (Corresp	ondence address below						
Name					_				
DAVID H. SHEN, IRF SEMICONDUC	TOR, INC.								
Address 6 RESULTS WAY									
City				State				ZIP	
CUPERTINO				CA				95014	
Country						Fax			
U.S.A.	408-777-8090				408-777-8091				
I hereby declare that all statement and belief are believed to be statements and the like so mad false statements may jeopardize	true; and tur	tner tnat ble by fine	tnese sta or impris	onment	, or l	both, under 18 l			
NAME OF SOLE OR FIRST INVENTOR: A petition has been filed for this unsigned inventor									
Given Name (first and middle [if any]) DAVID H.						Family Name or Surname SHEN			
Inventor's Signature South Affin							Date 12/4/03		
Residence: City	State			Country			Citizenship		
Saratoga	California			U.S.A			U.S.A.		
Mailing Address 21037 Dorsey Way						•			
City	State			ZIP		5		Country	
Sartatoga	CA				95070			U.S.A.	
NAME OF SECOND INVENTO	R:			T	A	petition has be	en filed	for this unsigned inventor	
Given Name (first and middle [if any])						Family Name or Surname			
Inventor's Signature	-							Date	
Residence: City	State			Country		Citizenship			
Mailing Address				<u>. I</u>			<u> </u>		
City	State			ZIP		Country			
		baing pagend	on the	sunnier	nenta	l sheet(s) PTO/SB/02	2A or 02LI	R attached hereto.	
Additional inventors or a legal r	epresentative are	ueing named	OII tile	_auphiei					

	Sample Form (former PTO/SB/15) (08-03)
ASSIGNMENT OF APPLICATION	Docket Number (Optional)
Whereas,I, DAVID H. SHEN of 21037 DORSEY WAY, SARATOGA, CALIFOR	
referred to as applicant, have invented certain new and useful improvements	in A RADIO FREQUENCY
RECEIVER ARCHITECTURE WITH TRACKING IMAGE-REJECT POLYPHA	
for which an application for a United States Patent was filed on	
Application Number	
for which an application for a United States Patent was executed on 12/	4/03, and
Whereas, IRF SEMICONDUCTOR, INC. of ISLAND of GRAND CAYMAN, C	
to "assignee" whose mailing address is 6 RESULTS WAY, CUPERTINO, CA	ALIFORNIA 95014, U.S.A is
desirous of acquiring the entire right, title and interest in the same;	
Now, therefore, in consideration of the sum of ZERO dollars (\$ 0.00 acknowledge, and other good and valuable consideration, I/We, the applicar and transfer unto said assignee the full and exclusive right to the said invent rights, title and interest in and to any and all Patents which may be granter hereby authorize and request the Director of the U.S. Patent and Tradema Patent to said assignee, of the entire right, title, and interest in and to the store the use and behoof of his legal representatives, to the full end of the granted, as fully and entirely as the same would have been held by me had made. Executed this	ition in the United States and the entire of therefore in the United States. I/We ark Office to issue said United States ame, for his sole use and behoof; and the term for which said Patent may be ad this assignment and sale not been
State of California SS: County of Santa Clara) State of California SS: Printed Name	Signature Signature Registration No., if applicable
Before me personally appeared said David H. She and acknowledged the foregoing instrument to be his free act and deed this	s 4 **
day of <u>1)ere mber</u> , 20 <u>03</u> .	RACHEL MURILLO ommission # 1342070 tary Public - California \$\frac{2}{5}\$ canta Clara County Comm. Expires Feb 1, 2006

Note: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, See below*.

forms are submitted. Total of

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STATEMENT UNDER 37 CFR 3.73(b) Applicant/Patent Owner: DAVID H. SHEN Application No./Patent No.: Based on Provisional Application No. 60/431,980 Filed/Issue Date: 12/10/2002/New Filing Entitled: A RADIO FREQUENCY RECEIVER ARCHITECTURE WITH TRACKING IMAGE-REJECT POLYPHASE FILTERING IRF SEMICONDUCTOR, INC., a CORPORATION (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.) states that it is: 1. 🔼 the assignee of the entire right, title, and interest; or 2. an assignee of less than the entire right, title and interest. The extent (by percentage) of its ownership interest is in the patent application/patent identified above by virtue of either: A. [An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame , or for which a copy thereof is attached. OR B. [] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown 1. From: -- To: -The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. To: The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. [] Additional documents in the chain of title are listed on a supplemental sheet. [] Copies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08] The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee. Telephone number Signature

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.